# SUPPLEMENT TO
# TECHNICAL MANUAL
for
# RADIO SET AN/GRC-9

TÉLÉCOMMUNICATIONS RADIOÉLECTRIQUES ET TÉLÉPHONIQUES
PARIS - FRANCE

# SUPPLEMENT

**MAY 1953**

---

# SUPPLEMENT TO
# TECHNICAL MANUAL
## for
# RADIO SET AN/GRC-9

The following information, published on order No. DA91-557-Euc-2, supplements the technical manual for AN/GRC-9.

The serial numbers of the equipment covered in this supplement are :

| *Name* | *Serial numbers* |
|---|---|
| Receiver-Transmitter RT-77/GRC-9 | 0001 thru 3322 |
| Generator GN 58-A | 0001 thru 3322 |

**Personnel using this equipment and having custody of this technical manual will enter suitable notations beside each affected paragraph and figure in the technical manual to indicate the presence of this supplementary information.**

---

**Par. 103.** column 2 last line add :

(3) on the hand generator GN 58-A-Fr procured under contract No. DA-91-557-Euc-2, the voltage regulator 224 is secured on bracket 246, afixed on the generator structure. Therefore, the voltage regulator adapter with its octal base on one side, is not to be used.

**Par. 103.** page 103 add the following changes :

| Ref No. | Generator GN 58-A-Fr |
|---|---|
| 225 | 28 mh |
| 226 | 7.5 μh |
| 227 | 2.8 mh |

**App. II. Par. 2.** Add the following after paragraph 2 :

**2.1. Identification Table of Parts for Receiver-Transmitter RT-77/GRC-9,** serial numbers thru for Order No. DA-91-557-Euc-2.

These Units have the same stock numbers as are assigned to the items in "Col. 2" of paragraph 2 except as follows:

*a.* C 146 is not used.

*b.* T101, T102, T103, T1, T2, and T3 are changed as follows:

| Ref symbol | Name of part and description | Function of part | Signal Corps stock No. |
|---|---|---|---|
| T101 | COIL, RF : oscillator ; 2 wnd, single layer wnd ; aluminium shield can, 1 $\frac{9}{16}$″ sq × 3 $\frac{5}{32}$″ h; phenolic coil w/powdered iron core ; built-in trimmer capacitor 2.5 to 10 μμf for tuning; screwdriver ajustment thru top of can; 4 leads approx 1 3/4″ lg from bottom of can ; can marked "OSC, BAND 1"; contains temperature compensating capacitor C 149 μμf ± N. TRT dwg 42.183 | V101, BAND 1 oscillator coil. | 3C1084Z76-2 |

| Ref symbol | Name of part and description | Function of part | Signal Corps stock No. |
|---|---|---|---|
| T102 | COIL, RF : oscillator ; 2 wnd, multiple layer wnd ; aluminium shield can, 1 $\frac{9}{16}$″ sq × 3 5/8″ h ; phenolic coil w/powdered iron core ; built-in trimmer capacitor 2.5 to 12 μμf for tuning ; screwdriver ajustment thru top of can ; 2 leads and 3 solder lug term at bottom of can ; can marked "OSC, BAND 2" ; contains temperature - compensating capacitor C150 : μμf ± N TRT dwg 42.184 | V101, BAND 2 oscillator coil | 3C1084Z76-3 |
| T103 | COIL, RF : oscillator ; 2 wnd ; single layer wnd ; aluminium shield can, 1 $\frac{9}{16}$″ square × 3 5/8″ h ; phenolic coil w/ powdered iron core ; built-in trimmer capacitor 2.5 to 10 μμf ; screwdriver ajustment thru top of can ; can marked "OSC, BAND 3" ; contains temperature-compensating capacitor C151 : μμf ± N TRT dwg 42.185 | V101, BAND 3 oscillator coil | 3C1084Z76-4 |

| Ref symbol | Name of part and description | Function of part | Signal Corps stock No. |
|---|---|---|---|
| T1 | COIL assembly, RF : antenna ; aluminium shield can, 3 double wnd coils, stamped "T1" ; includes the following capacitors :<br>C1 μμf ± N<br>C2 μμf ± N<br>C3 μμf ± N<br>TRT dwg 42.286 | Receiver antenna Transformer assembly | 2C1084Z28-4 |
| T2 | COIL assembly, RF : mixer ; aluminium shield can ; 3 double wnd coils w/adj iron cores ; stamped "T2" ; includes the following capacitors :<br>C11 μμf ± N<br>C12 μμf ± N<br>C13 μμf ± N<br>C14 μμf ± N<br>TRT dwg 42.287 | R-f coupling Transformer assembly between V1 and V2 | 2C1084Z28-5 |
| T3 | COIL assembly, RF : osc ; aluminium shield can ; 3 tapped coils w/adj iron cores ; stamped "T3" ; includes the following capacitors :<br>C19 μμf ± N<br>C21 μμf ± N<br>C23 μμf ± N<br>TRT dwg 42.288 | V2, h-f oscillator coil assembly | 2C1084Z28-3 |

# MAINTENANCE PARTS LIST

## TABLE OF PARTS FOR RADIO SET AN/GRC-9 Fr

Note : The maintenance Parts list described below is procured on order nº DA-91-557-EUC 2

| Signal Corps Stock No | T. R. T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 2A-203-101 | 60794 | | Antenna AT-101/GRC-9 Fr on reel RL 29 Fr | 1 | 28 |
| 3G-1250-44-1 | 24448 | | Insulator, steatite for antenna | 10 | 96 |
| 2A-203-102 | 60795 | | Antenna AT-102/GRC-9 Fr on reel RL 29 Fr | 1 | 28 |
| 2Z-551-172 | 80535 | | Bag BG 172 Fr | 1 | 14 |
| 3H-160-175 | 80564 | | Bag BG 175 Fr | 1 | 14 |
| 2Z-553-140 | 80565 | | Bag CW 140-GRC/9 Fr, (radio-set) | 1 | 14 |
| 3E-1999-86 | 42380 | | Cable assembly cord CD 1086 Fr, 7 Ft lg. | 1 | 66 |
| 2Z-7226-279 | 42374 | | Connector female contact : Plug PL 279, 9 rd. pol. cont. (CD 1086 Fr) | 2 | 75 |
| 2Z-7226-294 | 42373 | | Connector, plug : Plug PL 294, 9 pol. cont. (CD 1086 Fr) | 2 | 75 |
| 3E-1999-119 | 42378 | | Cable assembly, CD 1119 Fr, 34 1/2″ lg., 3 cond, W/4 prong male | 1 | 66 |
| 2Z-7226-P257 | 42376 | | Connector female contact 1 Plug PL 257 (CD 1119 Fr) | 1 | 64 |
| 2A-712 | 60838 | | Counterpoise CP 12 Fr } on reel RL 29 Fr | 1 | 44 |
| 2A-713 | 60839 | | Counterpoise CP 13 Fr } | | |
| 2Z-1203-515 | 42108 | | Bracket FT 515 Fr | 1 | 14 |
| 2A-3129 | 41695 | | Reel RL 29 Fr | 3 | 22 |
| 2A-3128 | 42179 | | Reel RL 28 Fr | 1 | 10 |
| 3H-1407 | 42123 | | Grank GC 7 Fr (for GN 58 Fr) | 2 | 14 |
| 2A-1312 | 42208 | | Guy GY 12 Fr (for vertical antenna) | 1 | 126 |
| 2A-1336-42 | 42205 | | Guy GY 42 Fr (for vertical antenna) | 1 | 126 |
| 6Z-4938 | 42177 | | Halyard M 378 Fr | 1 | 126 |
| 6Z-4939 | 42176 | | Halyard M 379 Fr | 1 | 126 |
| 3C-627 | 60842 | | Insulator IN 127 Fr | 1 | 96 |
| 3Z-3445 | 42386 | | Key J 45 Fr, with cord CD 201 A Fr | 1 | 12 |

## TABLE OF PARTS FOR RADIO SET AN/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 3E-1201 | 26747 | | Cable assembly cord CD 201 A Fr | 1 | 26 |
| 2Z-6102 B | 80540 | | Leg LG 2 B Fr | 1 | 12 |
| 2Z-6103 B | 42130 | | Leg LG 3 B Fr | 2 | 21 |
| 2A-2088-65 | 60843 | | Mast Base MP 65 Fr (Antenna) | 1 | 28 |
| 2A-2416 | 42414 | | Mast Section MS 116 A Fr | 3 | 180 |
| 2A-2417 | 42415 | | Mast Section MS 117 A Fr | 1 | 60 |
| 2A-2418 | 42419 | | Mast Section MS 118 A Fr | 1 | 60 |
| 2Z-6763-350 | 80568 | | Mounting MT 350/GRC-9 Fr | 1 | 16 |
| 2Z-8060174 | 80566 | | Roll BG 174 Fr | 1 | 14 |
| 2Z-6310-7 | 60850 | | Loud speaker LS 7 Fr | 1 | 38 |
| 2Z-9632-515 | 42352 | | Transformer of the Loud speaker | 1 | 38 |
| 2A-3327 | 26594 | | Stake GP 27 Fr | 4 | 119 |
| 1B-128 | 26744 | | Wire W 128 Fr, 10 Ft lg. | 1 | 80 |
| 3E-7173-22 | 42437 | | Cable assembly, 4 cond. (between Receiver and Transmitter) | 1 | 22 |
| 6Z-3810-82 | 26547 | | Fastener, latch : case, steel 3-3/16" lg. × 1" wd × 1" thk overall | 10 | 156 |
| 2Z-4868-444 | 42180 | | Gasket, cover to case seal 16 1/3" diam × 0,24" thk | 1 | 32 |
| 2Z-3350-109 | 80538 | | Panel cover CW 109/GRC-9 with gasket draw. 42180 | 1 | 10 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T. R. T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **CERAMIC CAPACITORS** | | |
| 3-DA1-148-1 | | C-117 | 1000 mmF ± 20 % variable temp. coef. 300 vdcw | 1 | 14 |
| 3D-9005-71 | | C-129 | 5 mmF ± 0,3 mmF variable temp. coef. 550 $10^{-6}$ 500 vdcw t. TJ | 1 | 22 |
| 3D-9006-16 | | C-124<br>C-125 | 6 mmF ± 10 % var. temp. coef. 100 $10^{-6}$ 1000 vdcw | 2 | 14 |
| 3D-9010-108 | | C-126<br>C-127 | 10 mmF ± 10 % var. temp. coef. 150 $10^{-6}$ 1000 vdcw | 2 | 30 |
| 3D-9045-8 | | C-123 | 45 mmF ± 5 % neg. coef. 750 $10^{-6}$ 1000 vdcw U.J. | 1 | 14 |
| 3D-9080-12 | | C-122 | 80 mmF ± 5 % neg. coef. 750 $10^{-6}$ 1500 vdcw U.J. | 1 | 14 |
| 3D-9470-16 | | C-136 | 470 mmF ± 20 % var. temp. coef. 300 vdcw | 1 | 14 |
| 3DA-6800-2 | | C-115 | 6800 mmF + 30 % — 20 % var. temp. coef. 300 vdcw | 1 | 14 |
| 3D-9047-39 | | C-143 | 47 mmF ± 10 % neg. coef. 750 $10^{-6}$ 500 vdcw U.J. | 1 | 22 |
| 3D-9005-71 | | C-147 | 5 mmF ± 0,25 pF neg. coef. 750 $10^{-6}$ 500 vdcw U.K. | 1 | 22 |
| 3DE-135 | 42219 | C-128A<br>C-128B<br>C-128C | 120 mmF<br>60 mmF<br>135 mmF<br>3 sect. 135-60-120 mmF, ± 6 % variable neg. temp. coef. 300 to 800 $10^{-6}$ 1000 vdcw | 1 | 58 |
| | | | **MICA CAPACITORS** | | |
| 3K-2051122 | | C-105<br>C-109<br>C-110 | 510 mmF ± 5 % 500 vdcw | 3 | 30 |
| 3K-3010221 | | C-142 | 1000 mmF ± 10 % 500 vdcw | 1 | 14 |
| 3K-3582251 | | C-104 | 8200 mmF ± 10 % 300 vdcw | 1 | 14 |
| 3DA3-109 | | C-144<br>C-145 | 3000 mmF ± 10 % 750 vdcw | 2 | 24 |
| | | | **PAPER CAPACITORS** | | |
| 3DA-10380 | 29810 | C-103<br>C-140 | 10000 mmF ± 20 % 120 vdcw service | 2 | 27 |
| 3DA-1002091 | 29663 | C-132<br>C-133<br>C-137 | 100000 mmF + 10 % — 30 % 120 vdcw service | 3 | 49 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 3DA-25088 | | C-134<br>C-138<br>C-139 | 250000 mmF ± 10 % 200 vdcw service | 3 | 43 |
| 3DA-10382 | 29809 | C-116<br>C-121<br>C-148 | 10000 mmF ± 20 % 1000 vdcw service | 3 | 42 |
| | | | **ELECTROLYTIC CAPACITORS** | | |
| 3DB-100-10 | 42224 | C-135 | 100 µF + 200 %<br>— 10 % 6 vdcw | 1 | 56 |
| | | | **COILS** | | |
| 3C-1084Z76-2 | 42183 | T-101 | Coil, oscillator « Band I » includes C-106B-149 | 1 | 12 |
| 3C-1084Z76-3 | 42184 | T-102 | Coil, oscillator « Band II » includes C-107A-150 | 1 | 12 |
| 3C-1084Z76-4 | 42185 | T-103 | Coil, oscillator « Band III » includes C-108C-151 | 1 | 12 |
| 3C-1084Z28-9 | 42186 | T-104 | Shield with : | 1 | 14 |
| 3C-1084Z28-12 | | T-104A | Coil, RF doubler plate « Band I » includes C-114 | | |
| 3C-1084Z28-16 | | T-104B | Coil, RF doubler plate « Band II » | | |
| 3C-1084Z28-11 | | T-104C | Coil RF : doubler plate « Band III » | | |
| 3C-1084Z28-19 | 42187 | T-107 | Coil RF : power amplifier plate « Band I » | 1 | 12 |
| 3C-1084Z28-13 | 42188 | T-108 | Coil RF : power amplifier plate « Band II » | 1 | 12 |
| 3C-1084Z28-14 | 42189 | T-109 | Coil RF : power amplifier plate « Band III » | 1 | 12 |
| 3C-1084Z28-6 | 42190 | T-110AB | Coil Assembly : antenna tuning | 1 | 14 |
| 2Z-9631-137 | 42191 | T-112 | Transformer AF : microphone type | 1 | 12 |
| 2Z-9634-39 | 42192 | T-113 | Transformer AF : modulation type | 1 | 12 |
| 3C-1084Z28-10 | 42193 | T-114 | Coil RF, receiver antenna transformer includes C 141 | 1 | 14 |
| 2Z-3262-19 | 42206 | | Core ajustable tuning W/ gear rack for T 110 A & B | 2 | 17 |
| 3C-323-177D | 42194 | L-101 | Coil RF choke 1,25 mH ± 5 % | 1 | 23 |
| 3C-1084Z28-7 | 42195 | L-102 | Coil RF : antenna loading | 1 | 16 |
| 3C-323-177B | 42196 | L-103 | Coil AF : filter choke 5,5 henrys 10 mA 550 ohms | 1 | 16 |
| 3C-1084Z28-8 | 42197 | L-104 | Coil RF : compensator 12 uH ± 1 % | 1 | 18 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **CARBON RESISTORS** | | |
| 3Z-6822-1 | | R-122<br>R-123 | 22 megohms ± 10 % 1 watt | 2 | 38 |
| 3RC3OBF200J | | R-108 | 20 ohms ± 5 % 1 watt | 1 | 18 |
| 3RC3OBF390J | | R-125 | 39 ohms ± 5 % 1 watt | 1 | 18 |
| 3RC2OBF560K | | R-119 | 56 ohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF680J | | R-109 | 68 ohms ± 5 % 1/2 watt | 1 | 18 |
| 3RC2OBF271K | | R-111 | 270 ohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF331K | | R-103 | 330 ohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF102K | | R-107 | 1000 ohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF362J | | R-106 | 3600 ohms ± 5 % 1/2 watt | 1 | 18 |
| 3RC2OBF822K | | R-121 | 8200 ohms ± 10 % 1/2 watt | 1 | 22 |
| 3RC2OBF153K | | R-113 | 15 Kohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF183K | | R-101 | 18 Kohms ± 10 % 1/2 watt | 1 | 18 |
| 3RC2OBF393K | | R-114<br>R-115 | 39 Kohms ± 10 % 1/2 watt | 2 | 24 |
| 3RC3OB9393K | | R-120 | 39 Kohms ± 10 % 1 watt | 1 | 18 |
| 3RC2OBF104K | | R-102<br>R-104 | 100 Kohms ± 10 % 1/2 watt | 2 | 32 |
| 3RC2OBF474K | | R-112 | 470 Kohms ± 10 % 1/2 watt | 1 | 18 |
| | | | **WIRE WOUND RESISTORS** | | |
| 3Z-5999-10 | 42217 | R-110 | 9 ohms ± 3 % 5 watts | 1 | 22 |
| 3Z-6620-71 | 42216 | R-105<br>R-117<br>R-118 | 20 Kohms ± 5 % 10 watts | 3 | 30 |
| 3Z-6630-112 | 42229 | R-124 | 30 Kohms ± 5 % 10 watts | 1 | 22 |
| | | | **CONNECTORS** | | |
| 2Z-3029-23 | 42337 | J-102 | Connector, male contact : 9 banana type contact w/rubber gasket | 1 | 22 |
| 2Z-8799-134 | 42333 | J-103 | Connector male contact : 4 cont. Amphenol 97-3102-14S-2P (battery connector for BA48) | 1 | 16 |
| 2Z-9409-66 | 28379 | J-106 | Board, terminal, 9 solder lugs, 9 female cont. connectors, phenolic stenciled 1 to 9 | 1 | 22 |
| | | | **SOCKETS** | | |
| 2Z-5883-318 | 26844 | X-113 | Lampholder, miniature bayonet - pilot lamp | 1 | 28 |
| 2Z-8677-95 | 42556 | X-108<br>X-114 | Socket, tube miniature with bracket ceramic type B1506-57 | 2 | 20 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 2Z-8877-116 | 42558 | X-101 | Socket tube 7 prong miniature ceramic type B1505-55 | 1 | 14 |
| 2Z-5885-8 | 42347 | X-111 | Lampholder for indicator lamp NE47 | 1 | 28 |
| 2Z-8675-85 | 26833<br>26834 | X-109 | Socket tube bakelite with spring but without bracket (for power amplifier 2E22) | 1 | 14 |
| 2Z-8678-326 | 26832 | X-110<br>X-112 | Socket, tube - octal bakelite amphenol 74-8T | 2 | 20 |
| 2Z-8672-8 | 24589 | X-102<br>to X-107 | Socket crystal | 6 | 52 |
| | | | **SWITCHES** | | |
| 3Z-9903A-64 | 60889 | S-101<br>A to N | Switch rotary band change SW for transmitter c/s SW, capacitors, resistances, shaft, 6Kt's, « o » ring ; 5 ceramic and 4 bakelite wafers | 1 | 26 |
| 2Z-9903A-64-1 | 42530 | S-102<br>A to F | Switch assembly rotary ant. selector SW, 2 capacitors, 18 jumper wires, 1 phenolic and 4 ceramic sect. | 1 | 26 |
| 3Z-9825-41-11 | 42534 | S-103<br>A to D | Switch rotary, 4 pole 3 position - 6 jumper wires (OFF-SEND-STANDBY) | 1 | 26 |
| 3Z-9825-41-10 | 42266 | S-105<br>1 to 4 | Switch, rotary, 7 pole 12 position, 1 phenolic and 1 ceramic wafer (Phone-MCW-CW) | 1 | 26 |
| 3Z-824-42-1 | 42336 | S-104 | Switch push | 1 | 27 |
| | | | **JACKS** | | |
| 2Z-5595-16 | 42341<br>26855 | J-104 | Jack, telephone, 3 cont. in rubber ballon (microphone) | 1 | 10 |
| 2Z-5595-15 | 42342<br>26855 | J-105 | Jack, telephone, 2 cont. in rubber ballon (Key) | 1 | 10 |
| | | | **POTENTIOMETERS** | | |
| 3Z-74991-52 | 42222 | R-115 | Resistor variable, carbon, 1 mégohm + 20 % (Side tone control) | 1 | 32 |
| | | | **VARIABLE CAPACITORS** | | |
| 3D-9202-VE6 | 60880 | C-101<br>A-B-C | Capacitor, variable : air, 3 sect. (tuning gang) | 1 | 7 |
| 3D-9008-VE5-2 | 42292 | C-102 | Capacitor, variable : air : 2,5 to 8,5 mmF | 1 | 7 |
| 3D-9013-VE8-1 | 42290 | C-111<br>112-113 | Capacitor, variable, air 1,8 to 13,8 mmF | 3 | 17 |
| 3D-9009-V-18 | 42231 | C-118<br>119-120 | Capacitor, variable air, 3,5 to 9 mmF | 3 | 17 |
| | | | **RELAYS** | | |
| 2Z-7597-8 | 42308 | K-101 | Relay (keying) | 1 | 58 |
| 3H-937 | 42307 | K-102 | Circuit breaker (overload relay) | 1 | 14 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **LAMPS** | | |
| 2Z-5971-1 | 42343 | I-102 | Lamp, incandescent 2 v 60 mA | 1 | 45 |
| 2J-3A4 | 42568 | V-101 102-105 | Tube, electron. JAN 3A4 | 3 | 458 |
| 2Z-5889-15 | 42339 | I-101 | Lamp NE47 (indicator lamp) | 1 | 25 |
| 2J-OC3/VR105 | 42566 | V-104 | Tube OC3/VR105 | 1 | 178 |
| 2J-2E22 | 42503 | V-103 | Tube 2E22 | 1 | 158 |
| 3H-4860-50 | 42317 | CR-101 | Rectifier, metallic, selenium, input 3,6 vdc 200 mA | 1 | 25 |
| 2C-5395-1306/D1 | 28209 | | Seal, water : rubber, bushing W/brass insert (for dial shaft seal) | 1 | 18 |
| 2Z-8304-111 | 42508 | | Shield (shield plate for 3 tubes) | 1 | 14 |
| 3Z-770-4-58 | 28363 | | Board, terminal, for 2 capacitors, 4 solder lug term. 1 3/8″×1 5/16″ | 1 | 24 |
| 3Z-770-3-22 | 28378 | | Board, terminal, for 3 capacitor and 1 resistor, 3 solder lug term 1 3/4″×1 1/2″ | 1 | 24 |
| 2Z-9403-210 | 28359 | | Board, terminal, 3 banana jacks, stenciled J101A-B-C, phenolic 6 1/2″×1/2″×3/16″ | 1 | 14 |
| 2Z-9406-253 | 28418 | | Board, terminal, 6 brass term, 3 brass insert, stenciled R101-121-C-104 | 1 | 14 |
| 2Z-9411-44 | 28364 | | Board, terminal, 11 brass term, 2 brass inserts bakelite, stenciled R103-106-107-111-112 | 1 | 14 |
| 2Z-9413-29 | 28419 | | Board, terminal, 13 term, 2 brass inserts, stenciled C136-137-140-R113-114-116 | 1 | 14 |
| 2Z-1244-142 | 28013 | | Bracket, relay support | 1 | 68 |
| 2Z-1607-58 | 42332 | | Cap, cover for battery connection with chain | 1 | 14 |
| 6D-10105-16 | 28373 | | Chart calibration | 1 | 9 |
| 2Z-3352-156 | 26843 | | Cover jack, rubber cap | 2 | 32 |
| 2Z-4868-448 | 28167 | | Gasket, antenna binding post | 2 | 77 |
| 2C-5395-1306/G4 | 25015 | | Gasket battery connector plug, rubber | 1 | 45 |
| 2Z-4868-445 | 28083 | | Gasket, binding post, rubber 0,114″×0,254″ | 2 | 77 |
| 2C-5395-1306/G7 | 28054 | | Gasket condenser shaft : rubber | 2 | 77 |
| 2C-5395-1306/G10 | 26853 | | Gasket indicator lampholder : rubber | 1 | 45 |
| 2C-5395-1306/G8 | 26856 | | Gasket light filter holder, rubber, 0,718″×0,875″ ×0,048″ | 1 | 32 |
| 2Z-4868-446 | 26838 | | Gasket power plug : rubber | 1 | 32 |
| 2Z-4868-447 | 42491 | | Gasket rubber, 10 17/32″×10″×17/64″ | 1 | 32 |
| 3C-1838-6-25 | 28169 | | Insulator, bushing: extruded washer type 0,1405 ×3/8″×11/64″ Ø 1/16″ | 8 | 66 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 3C-1100-22-1 | 26917 | | Insulator, rectangular, steatite (insulates binding post from front of panel) | 1 | 14 |
| 2Z-5786-110 | 28015 | | Knob aluminium single, flourescent marker on one end | 1 | 10 |
| 3C-1100-22 | 26916 | | Insulator standoff; rectangular, steatite (insulates binding post from inside of panel) | 1 | 16 |
| 2Z-5821-109 | 28016 | | Knob aluminium double flourescent marker on top and sides | 2 | 17 |
| 2Z-5821-110 | 28253 | | Knob round black phenolic, W/dial lock and dial | 1 | 10 |
| 2Z-6125-43 | 26852 | | Lens, indicator lamp, polaroid | 1 | 14 |
| 2Z-5576/1 | | | Nut (jack mounting) 3/8″-32, 7/64″ × 1/2″ across plate | 2 | 24 |
| 2Z-741-21-1 | 26923 | | Post, binding W/plastic caps | 2 | 32 |
| 2Z-2712-114 | 28163 | | Clip, electron tube 1 3/8″ diam. max. opening | 1 | 43 |
| | 28241 | | Pinion for antenna tuning | 2 | 48 |
| | 28467 | | Axis for antenna tuning | 1 | 24 |
| | | | **CERAMIC CAPACITORS** | | |
| 3D-9002-31 | | C-36 | 2 pf ± 1/2 pf neg. coef. $750^{10-6}$ 500 vdcw Type IK | 1 | 14 |
| 3D-9007-18 | | C-51 | 7 pf ± 1/2 pf coef. 0 500 vdcw | 1 | 14 |
| 3D-9051-23 | | C-39 | 51 pf ± 5 % neg. coef. $330^{10-6}$ 500 vdcw Type SH or two capacitors 24+27 pF | 1 | 14 |
| 3D-9091-8 | | C-29 | 91 pf ± 5 % neg. coef. $750^{10-6}$ 500 vdcw Type UJ | 1 | 14 |
| 3D-9100-246 | | C-47-52 | 100 pf ± 10 % neg. coef. $750^{10-6}$ 500 vdcw Type UJ | 2 | 30 |
| 3DA-1-148-1 | | C-8-28-53 | 1000 pf ± 20 % variable temp. coef. 300 vdcw | 3 | 14 |
| 3DA-1500-18 | | C-57 | 1500 pf ± 20 % variable temp. coef. 300 vdcw | 1 | 14 |
| 3D-9251-65 | | C-49 | 250 pf ± 20 % variable temp. coef. 500 vdcw | 1 | 14 |
| | | | **ELECTROLYTIC CAPACITORS** | | |
| 3DB-800-2 | 42305 | C-34A<br>C-34B | Capacitor fixed, electrolytic - 2 sect. 10 - 800 mF - 150-6 v<br>10 µf 150 volts | 1 | 45 |
| | | | **MICA CAPACITORS** | | |
| 3K-2030122 | | C-41 | 300 pf ± 5 % 500 vdcw | 1 | 14 |
| | | | **PAPER CAPACITORS** | | |
| 3DA-130-5 | 42285 | C-9-55 | 0,13 µf ± 20 % 150 vdcw | 2 | 24 |
| 3DA-250-88 | 42225 | C-40 | 0,25 µf ± 10 % 200 vdcw | 1 | 22 |
| 3DA-103-80 | 29810 | C-10-24-30-33-35-43-46-48-50-54-56-60 | 0,01 µf ± 20 % 120 vdcw | 12 | 88 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **COILS** | | |
| 3C-1084Z28-4 | 42286 | T-1 | Coil Assembly RF, antenna, includes C-1-2-3 | 1 | 12 |
| 3C-1084Z28-5 | 42287 | T-2 | Coil Assembly RF mixer, includes C-11-12-13-14 | 1 | 12 |
| 3C-1084Z28-3 | 42288 | T-3 | Coil assembly RF, oscillator, includes C18 to C23 and R3-4-5 | 1 | 12 |
| 2Z-9641-80 | 42294 | T-4-5-6 | Transformer M.F. | 3 | 12 |
| 2C-5395-1306/C12 | 42296 | T-7 | Coil RF, oscillator calibrator, includes C42 R14 | 1 | 12 |
| 2C-5395-1306/T4 | 42295 | T-8 | Coil RF, BFO transformer includes C58-59 and R26 | 1 | 14 |
| 2Z-9632-437 | 42306 | T-9 | Transformer AF, output | 1 | 9 |
| 3C-323-177-A | 42331 | L-16 | Coil, RF, choke 24 µH ± 10 % 0,25 ohms | 1 | 16 |
| | | | **CARBON RESISTORS** | | |
| 3RC-2OBF105K | | R-1-6 16-22 | 1 megohms ± 10 % 1/2 watt | 4 | 47 |
| 3RC-2OBF225K | | R-20 | 2,2 megohms ± 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF475K | | R-10 | 4,7 megohms ± 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF271K | | R-28 | 270 ohms ± 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF152K | | R-29 | 1500 ohms ± 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF472K | | R-15 | 4700 ohms ± 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF273K | | R-2-12 23-24 | 27 Kohms + 10 % 1/2 watt | 4 | 47 |
| 3RC-2OBF333K | | R-8 | 33 Kohms + 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF563K | | R-7-17 | 56 Kohms + 10 % 1/2 watt | 2 | 29 |
| 3RC-2OBF104K | | R-11-27 | 100 Kohms + 10 % 1/2 watt | 2 | 29 |
| 3RC-2OBF154K | | R-25 | 150 Kohms + 10 % 1/2 watt | 1 | 16 |
| 3RC-2OBF474K | | R13-18-21 | 470 Kohms + 10 % 1/2 watt | 3 | 39 |
| | | | **SOCKETS** | | |
| 2Z-5883-316 | 26845 | X-8 | Lampholder miniature bayonet, brass, includes mtg BKT | 1 | 12 |
| 2Z-8677-95 | 42556 | X-1-X-3 4-5-6-7 | Socket tube miniature steatite W/shield base type BI506-507 | 6 | 60 |
| 2Z-8677-116 | 42558 | X-2 | Socket tube miniature steatite type BI505-55 | 1 | 16 |
| 2Z-8672-8 | 24589 | X-9 | Socket crystal | 1 | 14 |
| | | | **SWITCHES** | | |
| 3Z-9825-6292 | 42313 | S-4 | Switch rotary (output impedance switch) | 1 | 30 |
| 3Z-9825-62284 | 42276 | S-3 (123) | Switch rotary (Phone-CW-NET-CAL) | 1 | 30 |
| 3Z-9825-4112 | 42319 | S1 A to F | Switch rotary (band switch) | 1 | 24 |
| 3Z-9824-99 | 42302 | S-2 | Switch push (dial light) | 1 | 30 |
| | | | **JACKS** | | |
| 2Z-5595-4 | 42340 | J-I-2 | Jack telephone 4 cont. | 2 | 27 |

## TABLE OF PARTS FOR RECEIVER-TRANSMITTER RT-77/GRC-9 Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **VARIABLE RESISTORS** | | |
| 3Z-74991-51 | 42301 | R-9 | Resistor, variable 1 mg ± 20 % 1/4 watt | 1 | 32 |
| 3Z-7499-222 | 42279 | R-19AB | Resistor, variable 1/2 mg ± 20 % 1/4 watt | 1 | 32 |
| | | | **VARIABLE CAPACITORS** | | |
| 3D-9180-V3 | 60825 | C-7 ABC | Capacitor variable air, 3 sect. 15 to 180 mmF | 1 | 10 |
| 3D-9011-VE5 | 42293 | C-4-5-6-15-16-17-25-26-27 | Capacitor variable air, 2 to 11,5 mmF | 9 | 52 |
| 3K-2024132 | 42291 | C-61 | Capacitor mica 240 mmF ± 5 % 500 vdcw | 1 | 22 |
| | | | **TUBES** | | |
| 2Z-5971-1 | 42343 | E-1 | Lamp incandescent 2 v 60 mA | 1 | 45 |
| 2J-1L4 | 42569 | V1-3 | Tube 1 L4 | 2 | 300 |
| 2J-1R5 | 42570 | V-2-4-7 | Tube 1 R5 | 3 | 578 |
| 2J-1S5 | 42571 | V-5 | Tube 1 S5 | 1 | 150 |
| 2J-3Q4 | 42567 | V-6 | Tube 3 Q4 | 1 | 150 |
| | | | **RECTIFIER** | | |
| 3H-48-58-16 | 42280 | CR-1 | Rectifier, 1,7 v output 1,4 v 350 mA | 1 | 31 |
| | | | **CELL** | | |
| 3A-9047-1 | 42289 | BT-1 | Cell, bias 5 v | 1 | 35 |
| 2X-105-200 | 26939 | I-1 | Crystal Unit CR 2/U quartz 200 Kc | 1 | 18 |
| 2Z-3352-156 | 26843 | | Cover, jack, steel W/rubber insert | 2 | 24 |
| 2Z-3718-86 | 60871+ 28324+ screws | | Dial (aluminium hub vinylite dial calibrated in 3 bands) | 1 | 14 |
| 2Z-3876-92 | 80572 | | Drive, gear type includes miniature bayonet socket | 1 | 10 |
| 2Z-4868-442 | 42413 | | Gasket, receiver panel to case seal, rubber 10 17/32″ lg. 5″ wd × 17/64″ thk | 1 | 45 |
| 2Z-5821-109 | 28016 | | Knob, bar, alum. double green flourescent marker | 1 | 7 |
| 2Z-5786-110 | 28015 | | Knob, bar, alum. single green flourescent marker | 3 | 17 |
| 2Z-5821-111 | 28255 | | Knob, round w/dial lock | 1 | 10 |
| 2Z-6126-8 | 26847 | | Lens, magnifying (Dial lens) | 1 | 12 |
| 3Z-741-21-1 | 26924 | | Post binding screw type 1″ lg, 58″ ∅ w/molded cap | 1 | 16 |
| 2Z-3775-1 | 26889 | | Seal water, rubber w/metal insert (seals dial shaft) | 1 | 18 |
| 2Z-8304-110 | 28390 | | Shield assembly, tube (shield plate for 7 tubes) | 1 | 7 |
| 2Z-8550-5 | 28117 | | Shutter, dial (exposes operating band) | 1 | 7 |
| | 42316 | | Gear for switch S-1 | 1 | 24 |
| | 26846 | | Balloon for jack-rubber | 2 | 24 |

## TABLE OF PARTS FOR GENERATOR GN 58-A Fr

| Signal Corps Stock No | T. R. T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| | | | **CAPACITORS** | | |
| 3DB2-142 | 42312 | 233-1-2 | Capacitor fixed paper 2 mF + 20 % — 10 % 600 vdcw | 2 | 24 |
| 3DA250-534 | 42314 | 230 | Capacitor fixed paper 500000 mmF ± 10 % 200 vdcw | 1 | 14 |
| 3DB250-3 | 42320 | 231 | Capacitor fixed electrolytic 250 mmF + 100 % — 10 % 10 vdcw | 1 | 25 |
| | | | **COILS** | | |
| 3C-575-K1 | 42327 | 225 | Coil RF, filter 28 mH 0,45 Amp 10,2 to 10,9 ohms DC | 1 | 19 |
| 3C-575-K | 42318 | 227 | Coil AF, filter 2,8 mH 3 A 0,12 ohms DC | 1 | 10 |
| 3C-323-34X | 42321 | 226 | Coil RF, choke 9,4 μH 2,9 Amp 0,03 ohms | 1 | 19 |
| 3C-323-34Y | 42324 | 228-1<br>228-2 | Coil RF, filter 530 μH 150 mF 7 ohms | 2 | 31 |
| | | | **RESISTORS** | | |
| 3Z-5510-22 | 42323 | 229 | Resistor, fixed, wire wound 10.000 ohms ± 5 % 25 W | 1 | 14 |
| 3Z-6001-119 | 42322 | 245 | Resistor, ajustable, wire wound 10 ohms ± 10 % 10 W | 1 | 18 |
| 2Z-3070-40 | 42354 | 240 | Base - 9 plug - female | 1 | 10 |
| 3H-525-99 | 28584 | 236 | Brush set LV, 2 per set w/spring and cap | 1 | 135 |
| 3H-525-97 | 28585 | 235 | Brush set HV, 2 per set w/spring and cap | 1 | 135 |
| | 42325<br>+42326 | 224 | Voltage regulator w/bracket | 1 | 18 |
| 3H-2402A | 60832 | 237-1 | Generator DC 84 W out put, dual voltage 425 V and 6,65 V | 1 | 5 |
| 3H-2358/P7 | 42473 | | Bearing assembly, sleeve coupling ; right | 1 | 14 |
| 3H-2358/P8 | 42472 | | Bearing assembly, sleeve coupling ; left | 1 | 14 |
| 3H-2358/C1 | 28638 | | Cap, contact brush, bakelite w/brass insert | 4 | 115 |
| 3H-2358/C15 | | | Chain pitch 3/16″ × 7/32″ wd × 11 1/4″ lg, 60 links type S1807 | 1 | 10 |
| 3H-2358/C16 | | | Chain 3/16″ pitch × 1/32″ wd × 10 7/8″ lg, 58 links type S1811 | 1 | 10 |

# TABLE OF PARTS FOR GENERATOR GN 58-A Fr

| Signal Corps Stock No | T.R.T. drawing | Reference Symbol | NAME OF PART AND DESCRIPTION | Quantity per Equip. | Mainten. for 100 Equip. |
|---|---|---|---|---|---|
| 3H-2358/C30 | 28469 | | Coupling flexible—neoprene | 2 | 16 |
| 6Z-3810-26 | 26984 | | Fastener, latch : cover ; bonderized steel without paint | 6 | 70 |
| 3H-2358/G7 | 28061 | | Gasket, compressed for left bell | 1 | 17 |
| 3H-2358/G9 | 28060 | | Gasket, compressed for right bell | 1 | 17 |
| 3H-2358/G1 | 42500 | | Gasket, rubber tubular, cover seal | 1 | 31 |
| 3H-2358/G5 | 28062 | | Gasket seal between generator and chain drive 7/8″×1 1/2″×1/64″ | 1 | 14 |
| 3H-2358/S18 | 32209 | | Gear pinion sprocket, 3d stage (for generator drive) 16 teeth | 1 | 7 |
| 3H-2358/G46 | 42412 | | Gear spur, steel ; armature driving | 1 | 7 |
| 3H-2358/G44 | 26994 | | Gear assembly, spur ; pinion gear and sprocket, steel | 1 | 7 |
| 3H-2358/G45 | 26974 | | Gear assembly, spur ; sprocket wheel and sprocket pinion | 1 | 7 |
| 3H-2358/G40 | 44220 | | Gear case, magnesium 5-7/8″ wdx 6-1/3″×3-3/16″ d ; mts by hole over gear, front brg and tie bkt | 1 | 7 |
| 3H-2358/M10 | 28252 | | Mount, vibration round | 4 | 70 |
| 3H-2358/R25 | 26858 | | Ring, retainer socket coupling ring, brass nickel finish | 1 | 15 |
| 3H-2358/S15 | 24483 | | Spring torsion | 2 | 31 |
| 6L-53014-1 | 28546 | | Washer flat bearing bronze | 2 | 31 |
| 6L-53013-4 | 28547 | | Washer flat bearing bronze | 1 | 3 |
| 6L-53016-1 | 28599 | | Washer flat bearing bronze | 2 | 33 |
| 3H-2358/G4 | 29016 | | Washer flat round felt | 2 | 24 |
| 6L-53018-1 | 29611 | | Washer flat bearing bronze | 2 | 32 |
| 3H-5255-27 | 28312 | | Spring flat (for leg LG 3B) | 1 | 25 |

Imp. Henon, Paris — 7-53